

# Leading the Launch



IDAHO NATIONAL ENGINEERING AND ENVIRONMENTAL LABORATORY

*Delivering a payload of  
responsive technologies*



## Technology Deployment



HOME OF SCIENCE AND ENGINEERING SOLUTIONS



## Spectro Xepos XRF Analyzer (PCB Analyzer)

### *Problem*

INEEL's Decontamination and Decommissioning project needed to detect regulated metals and polychlorinated biphenyls (PCB) in samples collected from inactive facilities.

### *Baseline Technology*

Off-site laboratory analysis.

### *Innovative Technology*

The PCB analyzer is a X-ray fluorescence spectrometer system that accepts a diversity of samples, including powders, liquids, slurries, granules, films and coatings, with little or no sample preparation.

### *Comparison*

This analyzer requires 4 grams of sample material and provides analytic results within 10 minutes, compared with 100 gram samples required for off-site analysis that may take up to 90 days to complete.

### *Benefits*

This analyzer enabled the project to obtain same day results, accelerate the schedule, and has a potential 10-year cost avoidance of approximately \$2.79 million.